REMARKS

In the final Office Action of February 23, 2011, claims 1-6, 17-18 and 25-28 were rejected under § 103(a) as obvious over Kobayashi in view of Kiyotaka. Claims 5 and 17-18 were rejected under § 103(a) as obvious over Kobayashi and Simpson. Finally, claims 23-24 were rejected as obvious under §103(a) over the combination of Jose, Sekine et al and Kiyotaka. Claims 29-32 are new. Claims 1-6, 17, 18 and 23-32 remain pending in the application.

The present invention is directed to various improvements relating to automatic vehicle equipment control systems such as an automatic vehicle exterior light control system that uses a processor that is configured to effect automatic operation of the light control system as a function of an ambient light value using a weighted average of a plurality of ambient light level readings acquired from a photo transducer.

With regard to the Examiner's rejections to claims 1-6, 17-18 and 25-28 as being unpatentable over U.S. Patent No. 6,254,259 issued to Kobayashi (hereinafter "Kobayashi") in view of Japanese Patent No. JP 01-281496 filed by Kiyotaka (hereinafter "Kiyotaka"), Applicants have again amended claim 1, and respectfully traverse the § 103(a) rejection as to claims 1-4 and 6. The Examiner has taken the position that Kobayashi discloses an automatic vehicular exterior light control system that uses a controller to distinguish between reflections from both a reflective surface and those off an atmospheric condition. The Examiner correctly notes that Kobayashi is silent regarding the limitations of using a weighted average of the plurality of ambient light level readings. He then cited Kiyotaka that uses a dimming controller for a vehicle, wherein the ambient light value is a weighted average of a plurality of ambient light level readings acquired from a photo transducer. As was noted previously, Kiyotaka actually teaches away from the present invention since it operates to dim the vehicle panel light in response to dimming light conditions while the present invention works to decrease headlight intensity based on an increase in brightness from a reflective surface or atmospheric condition.

In order to further define the present invention over the art of record, we have amended claim 1 to indicate that a processor is configured to effect automatic operation "of the light

control system" as a function of an ambient light value. The Examiner should recognize that the weighted average calculation is used to control the on/off state of the light control system - not the headlights themselves. The headlights are controlled by the exterior light controller. The controller is configured to generate an exterior light control signal if the light control system "is operational" as a function of the presence of an atmospheric condition of interest. The controller is also configured to distinguish between reflections off of a highly reflective surface and reflections off of atmospheric conditions of interest based on input from at least one imager, i.e., the optical system 205. Support for these limitations is provided by Fig. 2 and paragraph [26] of the published specification. As the processor in the control system 225 calculates the weighted average based on light from the ambient light sensor. The processor, i.e., the microcontroller works to control operation of the system 225 based on the auto on/off switch that is shown in Fig. 2.

Thus, even if Kobayashi and Kiyotaka were combined it still would not teach an invention as it is presently claimed. Neither Kobayashi or Kiyotaka use a processor and a weighted average of ambient light values to control operation of the exterior light control system. Once the light control system is operational, only then can the exterior light controller work to provide the first and second state for controlling the vehicle headlights. The Examiner has also again rejected claims 5, 17, and 18 under §103(a) as being unpatentable over Kobayashi in view of the Simpson et al. publication. At least for the reasons set forth above, amended independent claim 17 also should be allowable over the art of record.

Finally, the Examiner again rejected claims 23 and 24 under § 103(a) as being unpatentable over Jose, Sekine et al and Kiyotaka. Applicants have also amended independent claim 23 consistent with the amendments set forth above. Applicant respectfully submits that that amended independent claim 23 sets forth a controller configured to affect automatic operation of an exterior light as a function of an ambient light value and operates using a controller configured to generate an exterior light control signal only if the light control system

is operational. As noted herein, these limitations are neither taught nor suggested by Jose, Sekine or Kiyotaka and Applicant requests the rejections on these grounds also be withdrawn.

Accordingly, Applicants again submit with this amendment that claims 1-6, 17, 18, and 25-32 are now in condition for allowance. An early notice thereof is earnestly solicited. No amendment made was related to the statutory requirements of patentability unless expressly stated herein. Moreover, no amendment made was for the purpose of narrowing the scope of any claim unless Applicants have argued herein that such amendment was made to distinguish over a particular reference or combination of references.

Should the Examiner have any further comments or suggestions that would expedite the allowance of this application, he is respectfully requested to telephone the undersigned. Please charge any additional fees associated with this amendment and credit any overpayments to Deposit Account No. 16-2463.

Respectfully submitted,

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Date

/Frank M. Scutch III/
Frank M. Scutch III, Registration No. 34 484

PRICE, HENEVELD, COOPER, DEWITT & LITTON,
LLP
695 Kenmoor, S.E.
Post Office Box 2567
Grand Rapids, Michigan 49501
(616) 949-9610

FMS/csd